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UNOCAL 76

AR2729

Southern California Division
Pipelines

March 23, 1992

Mr. Tom Dunkelman
U.S. Environmental Protection
Region 9, Field Operations
75 Hawthorne Street
San Francisco, California
94105-3901

DEL AMO SITE RESPONSE

Dear Sir:

Attached is Unocal Southern California Division Pipeline's response to your request about pipelines that we own or operate near the Del Amo Superfund Site in Carson, California.

If you have any questions concerning our response, or if you require further information, please contact me at (310)903-8336.

Sincerely,

Hugh W. Craddock
Supervisor HS&E

DEL AMO SITE
INFORMATION REQUEST RESPONSE

1. Identify all pipelines and product transmission lines owned or operated by your company either currently or at some time in the past within a one-mile radius or of the Del Amo site. This should include all pipelines identified on p. 68 and p. 69 of the most recent Los Angeles Thomas Brothers map book. For each pipeline identified provide the following information:

   a. Location of the pipeline (identify verbally and on a map):

      Unocal Southern California Division Pipeline operates six pipelines that are shown on pages 68 and 69 of the Los Angeles County Thomas Brother's Atlas. In addition, we operate a line with a lease agreement from Santa Fe Pacific Pipeline Company. Copies of these pages are enclosed with all the pipeline routes highlighted. Only three of these pipelines approach within one mile of the Del Amo Site. These are:

      1) Torrance-Watson Products Pipeline - Runs from Unocal's Torrance Tank Farm in Torrance to Santa Fe Pacific Pipeline's Watson Terminal in Carson. Route is north on Normandie Avenue then east along the southern edge of the Del Amo Site. Passes within approximately 20' of monitoring well P-1.

      2) Center Street Products Pipeline System - The Unocal 6" Products Pipeline carries products from Unocal's Torrance Tank Farm to a tie-in point to Santa Fe Pacific Pipeline's 12" line at Main St. and Del Amo Bl. in Carson. The SFPPL then carries the product to SFPPL's Watson Terminal where it is shipped north to Unocal's Center Street Terminal in Los Angeles.

      3) Los Angeles Terminal Pipeline System - Unocal ships products via SFPPL's 12" pipeline from the Torrance Tank Farm to Main St. and Del Amo Bl., Carson, where it ties into the Unocal 6" Products Pipeline which then transports the

products to Unocal's Los Angeles Terminal at 135th St. and Broadway, Compton.

b. Size of the pipeline:

1) *Torrance-Watson Products Pipeline: 20" O.D. x 0.250" wall thickness*
2) *LAT Products Pipeline: 6.5" O.D. 6 5/8" O.D. x 0.250" wall thickness*
3) *SFPPL 12" Pipeline: 12.75" O.D.*

c. Date of construction of the pipeline:

1) *Torrance-Watson Products Pipeline: 1981-1984, in service 1985.*

2) *Unocal 6" Products Pipeline: 1946; Various sections have been renewed over the years as construction along the right of way required relocation.*

3) *Construction details of the 12" SFPPL would best be obtained from that company.*

d. Type of materials transported through the pipeline (include a list of all materials, approximate volumes of all materials transported through the pipeline, approximate dates of transport of each material identified):

1) *Torrance-Watson Products Pipeline: Approximately 20,000 barrels of products have been batch-transported 2-3 times weekly since 1985 in about the following percentages: Gasoline 80%, Diesel fuel 10%, Turbine Fuel 10%.*

2) *Unocal 6" Products Pipeline/ SFPPL 12" Pipeline:*

The 6" pipeline has transported gasoline and diesel daily since commissioned in 1948.

Present shipping rate is 2000 barrels per hour through the LAT Products System which utilizes the south section of the 12" SFPPL and the north section of the Unocal 6". The daily average is 40,000 barrels.

The Center Street System employs the south section of the Unocal 6" Products line and the north section of the 12" SFPPL line. This system ships products at 1000-1500 barrels per hour, and operates five days a week.

e. Thorough discussion of the pipeline construction:

1) *Torrance-Watson Products Pipeline:*

- Constructed of API 5LX42 ERW line pipe, arc-welded girth welds per API 1104 standards.
- Pritec(extruded polyethylene over butyl rubber adhesive) coating for corrosion protection.
- All welds were 100% x-ray inspected.
- TDW Kaliper pigs run 12-20-84, and 4-25-85 and tested using an internal magnetic flux "smart pig" prior to commissioning.
- Tested with water for 24 hours at 925psi(88% of SMYP); 1.25 x flange working pressure.

2) *Unocal 6" Products Pipeline:*

- Constructed of ERW line pipe
- Coal tar enamel/felt corrosion coating
- 600 psi system

f. Results of all pressure tests conducted on the pipeline to date:

1) *Torrance-Watson Products Pipeline:*

- Hydrostatic test conducted successfully prior to putting into service in 1985. California State Fire Marshall requires hydrostatic testing of a new line before putting it into service. The next required pressure test is ten years thereafter. The 20" will be tested again in 1995.

2) *Unocal 6" Products Pipeline:*

- Successful annual hydrostatic tests have been conducted since 1977. One seam failure occurred during testing and a section of pipe was replaced. No product was released.

g. Indicate whether the pipeline is an interstate or intrastate pipeline.

All Unocal SCDPL's are intrastate.

h. Indicate and describe fully whether any other parties have been allowed to lease or otherwise use the pipeline.

No other parties have used the Unocal pipelines.

2. Provide a complete discussion of any suspected leaks or discharges that have occurred from any pipelines identified above. In your discussion describe the following:

a. cause of the leak or discharge:

No suspected leaks or discharges have occurred on the 20" pipeline. One leak has occurred on the 6" pipeline.

b. date of the leak or discharge:

November 20, 1980.

c. types and volumes of material that leaked or were discharged:

Estimate less than 1 barrel.

d. actions taken to stop the leak or discharge:

Line was excavated and repaired. This section was subsequently renewed in a large relocation.

e. actions taken to remediate soil or groundwater contaminated by the leak or discharge.

Soil in the leak area was excavated. Very little product was present. The leak was a very small pinhole.

3. Are you aware of any pipelines, owned or operated by your company, that may have leaked, discharged, or otherwise contributed to soil or groundwater contamination in the vicinity of the Del Amo site. If so describe fully.

No.

4. Provide a detailed discussion of the ability of your company to detect leaks or discharges from the pipelines identified

above. Including in your response an estimation of the maximum volume of material that could leak or be discharged from the above identified pipelines without being detected or noticed. Include in your discussion any changes or improvements in your leak detection capabilities during the period of your operation of this pipeline.

These pipelines are monitored for leakage by a computer assisted PLM system. The Pipeline Monitoring (PLM) system performs leak detection based on a volumetric over/short calculation. Data from the PLM database is used to identify the meters and tanks in a PLM system. Once a minute, the system scans the Rate database for corrected meter values and the Tank database for tank volumes. The volumetric change is calculated once a minute and the result is rolled into a long term and short term formula to determine system loss. Results are compared against acceptable long and short time limits.

Very small leaks over long periods of time would be difficult to detect.

5. Provide a detailed discussion of the ability of your company to detect and quantify leaks or discharges from a particular segment of a pipeline as compared to the ability to detect such leaks or discharges over a significant length of pipeline.

The PLM system is employed for the entire pipeline. We do not have additional surveillance on each line segment. Pressure-testing could be done segment by segment, but this usually is not done.

6. Are you aware of any pipeline, owned or operated by other companies, that may have leaked, discharged, or otherwise contributed to soil or groundwater contamination in the vicinity of the Del Amo site. If so, describe fully.

No knowledge of leaks by others.

7. Are you aware of any other companies, other than those identified in this letter, which own or operate pipelines or have owned or operated pipelines in the past in the vicinity of the Del Amo site.

No.

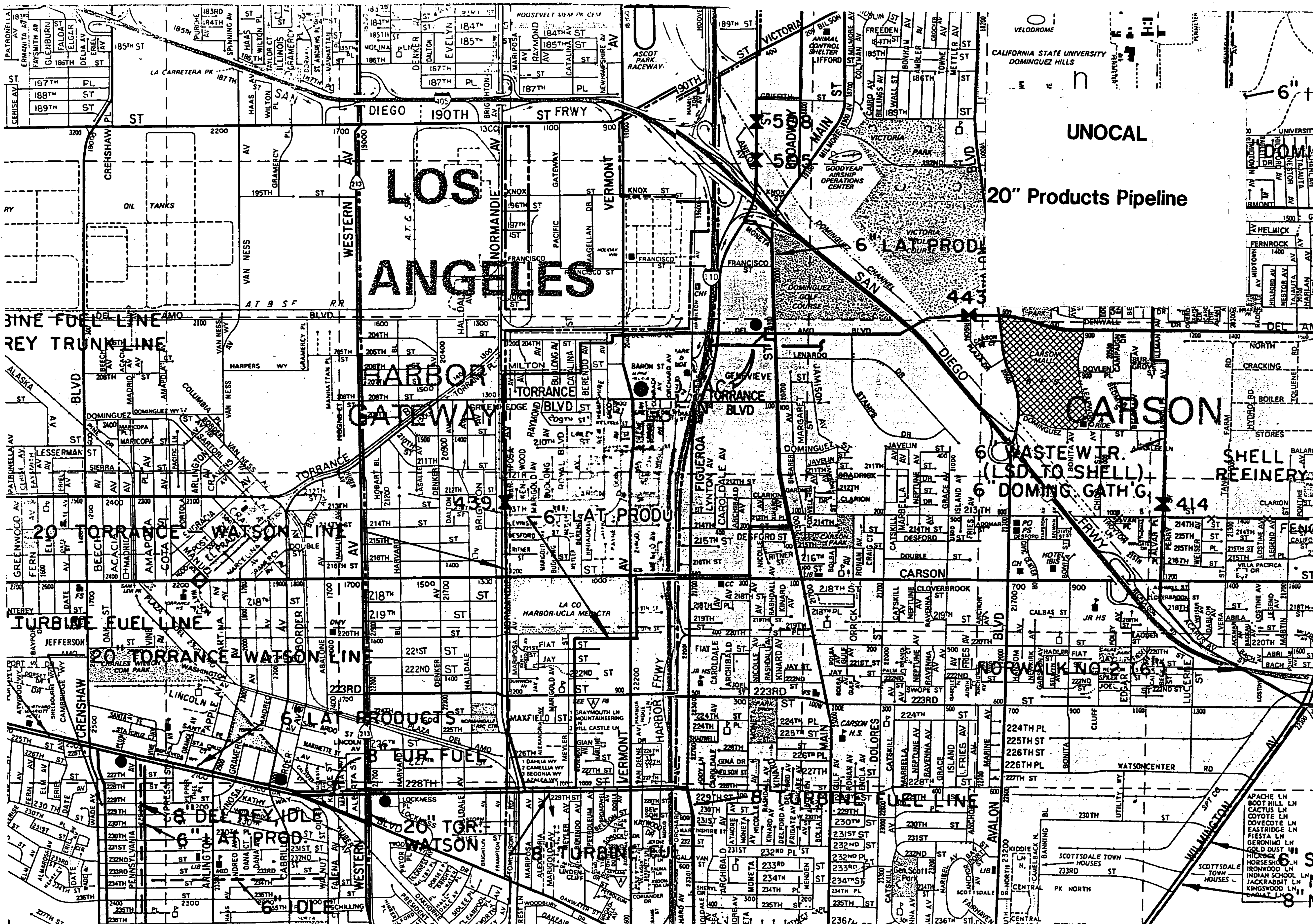
UNOCAL

6" Products Pipeline

Santa Fe Pacific Pipeline

12" Products

(partial route)



UNOCAL
20" Products Pipeline
LOS ANGELES
HARBOR GATEWAY
CARSON
SHELL REFINERY
CALIFORNIA STATE UNIVERSITY DOMINGUEZ HILLS
VELODROME
ASCOT PARK RACEWAY
GOODYEAR AIRSHIP OPERATIONS CENTER
VICTORIA PARK
VICTORIA GOLF COURSE
DOMINGUEZ GOLF COURSE
CARSON MALL
LA CO HARBOR-UCLA MED CTR
OIL TANKS
ROOSEVELT MEM PK CEM
CHARLES WILSON COM PARK
SCOTTSDALE TOWN HOUSES
6" LAT PROD
6" LAT PRODU
6" LAT PRODUCTS
6" LAT PROD
6" WASTE WTR. (LSD. TO SHELL)
6" DOMING. GATH'G.
NORWALK NO 2 (6")
20 TORRANCE WATSON LINE
20" TORRANCE WATSON LINE
20" TOR. WATSON
8" TUR FUEL
8" TURBINE FUEL LINE
8" TURBINE FUEL
TURBINE FUEL LINE
8" DEL REY IDLE
6" IDLE
443
414
439
SAN DIEGO FRWY
HARBOR FRWY
DEL AMO BLVD
TORRANCE BLVD
CARSON ST
WESTERN AV
NORMANDIE AV
VERMONT AV
FIGUEROA
MAIN ST
AVALON BLVD
WILMINGTON AV
CRENSHAW BLVD
VAN NESS AV
190TH ST